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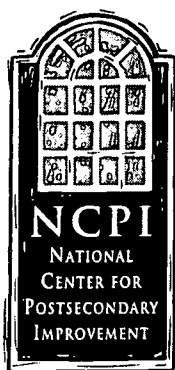
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## ABSTRACT

In summer 1997, the National Employer Survey (NES-II) was administered as a telephone survey to 6,971 private employers with more than 20 employees. The response rate was 78%. Two versions of the survey--one for manufacturing establishments and one for nonmanufacturing industries--were used. According to the NES-II, roughly 25% of establishments were participating in a school-to-work partnership. The most prevalent work-based learning placements were job shadowing (25%), internships (23%), and mentoring (21%). A substantial number of employers not participating in school-to-work also offered activities such as job shadowing, internships, and registered apprenticeships. Participation in school-to-work was highest among larger employers: 24% of establishments with 20-49 or 50-99 employees engaged in school-to-work partnerships versus 42% of those with 250-999 employees and 60% of those with 1,000 or more employees. Within the manufacturing sector, employer participation was most common in the transportation equipment and primary metals industries. In the health and communications sector, the participation rate was 44%. Establishments more likely to participate in school-to-work had the following characteristics: participated in other community activities, increased their permanent work force in the past 3 years, rated the local high school as adequate or better in preparing students for work, and used teachers' references in making hiring decisions. (MN)

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# Bringing School-to-Work to Scale: What Employers Report

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# NES - II RESULTS

## **BRINGING SCHOOL-TO-WORK TO SCALE: WHAT EMPLOYERS REPORT**

**First Findings from the New Administration of the  
National Employer Survey (NES-II)**

Designed by the Institute for Research on Higher Education, University of Pennsylvania

Administered by the U.S. Bureau of the Census

Jointly supported by the National Center for Postsecondary Improvement (NCPI) and the Consortium for Policy Research in Education (CPRE) through funding from the Office of Educational Research and Improvement, U.S. Department of Education

## The National Employer Survey

Originally conceived and designed by the National Center on the Educational Quality of the Workforce (EQW), the first administration of the National Employer Survey (NES) by the U.S. Bureau of the Census in 1994 shed new light on the practices and expectations of employers in their search for a skilled and proficient workforce. The NES was the first national, representative survey of employers to capture the interaction of employment and education issues from an establishment perspective.

The NES now falls under the aegis of the National Center for Postsecondary Improvement (NCPI) and the Consortium for Policy Research in Education (CPRE), two national research and development centers funded by the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education. In addition to capturing longitudinal information on many of the employers first surveyed, the new instrument—the NES-II—has been expanded to explore employers' hiring, training, and human resources practices; their participation in school-to-work partnerships; and their involvement in, as well as awareness of, community and education initiatives.

### "Bringing School-to-Work to Scale: What Employers Report"

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The findings and opinions expressed here do not reflect the position or policies of the U.S. Bureau of the Census.

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## Contents

About the Results .....	1
The Basics: Employer Participation and School-to-Work Placements .....	2
The Profiles: Participation by Size and Industry .....	4
The Deciding Factors: What Affects Employer Participation? .....	5

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# **BRINGING SCHOOL-TO-WORK TO SCALE: WHAT EMPLOYERS REPORT**

## **First Findings from the New Administration of the National Employer Survey (NES-II)**

Three years ago, the School-to-Work Opportunities Act signaled a new era in business-education partnerships—one many believed would foster more meaningful connections between the nation's classrooms and the worlds of employment and work. In its efforts to connect school- and work-based learning, the School-to-Work Act defined a set of benchmarks for employer participation in school-to-work partnerships. To date, attempts to gauge the actual extent to which employer participation has met or surpassed these benchmarks have reflected the reports of school officials and agency personnel rather than from employers themselves—making it difficult to draw a national and broadly based picture of the scale of employer involvement.

The latest administration of the National Employer Survey (NES-II) allows us to add the employer's perspective to these efforts. Last year, the National School-to-Work Office requested that the NES-II be used to gauge the national impact of school-to-work programs since the initiative's inception. Accordingly, a representative sample of establishments with 20 or more employees were asked by the U.S. Census Bureau to describe their involvement in school-to-work programs and work-based learning initiatives. An analysis of their answers offers two overarching conclusions:

- First, there is broad-based involvement of employers in both of these activities. Real involvement stretches across all industries and all establishment sizes.
- For both manufacturing and non-manufacturing establishments, the best predictor of participation in school-to-work partnerships is involvement in community activities.

### **About the Results**

In the summer of 1997, the NES-II was administered as a telephone survey by the U.S. Bureau of the Census. The Bureau contacted 6,971 private establishments with over 20 employees. The response rate—including complete and partial responses—was 78 percent. The NES-II sample included only private employers and over-sampled manufacturing establishments as well as those with more than 100 employees. Public-sector employers, non-profit institutions, establishments with less than 20 employees, and corporate headquarters were excluded from the sample. Computer-Assisted Telephone Interviewing (CATI) was used to administer the survey, which took approximately 45 minutes to complete. Two versions of the NES-II were administered: one for manufacturing

establishments and one for those in non-manufacturing industries. The surveys are identical and differ only linguistically in places where these sectors use different terms to describe comparable aspects of their businesses.

First findings from the NES-II are presented here, covering three school-to-work issues:

- the distribution of employer activity and school-to-work placements,
- the characteristics of employers who participate in school-to-work programs and work-based learning initiatives, and
- the factors that encourage or discourage employer involvement.

The rates reported in the graphs and tables are weighted to be representative for all U.S. establishments with more than 20 employees in the industries included in the sample.

## The Basics: Employer Participation and School-to-Work Placements

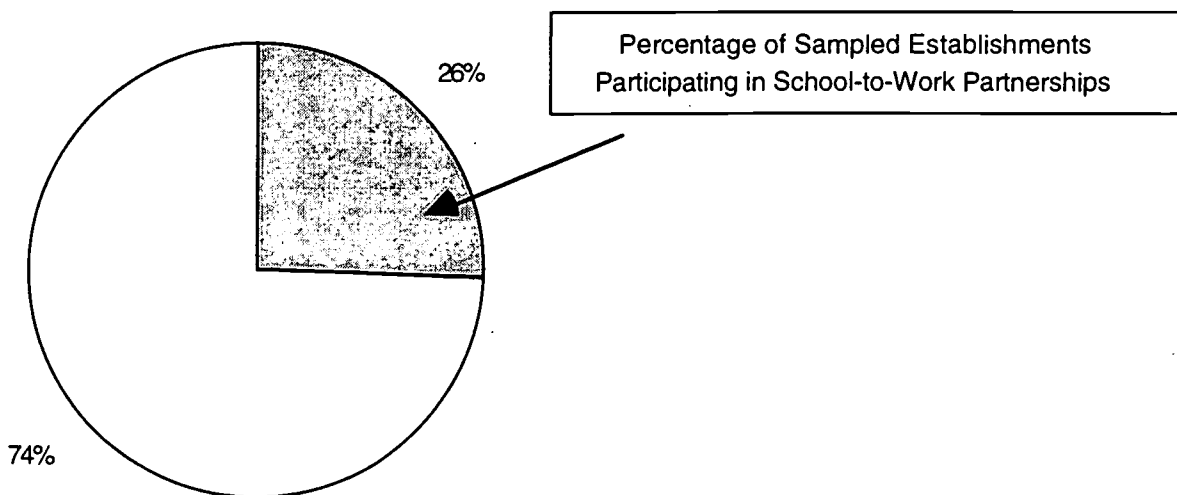
To understand the larger implications of current employer involvement in school-to-work partnerships, it is best to begin with the basic questions—what percentage of employers participate, and what types of school-to-work placements are offered?

When asked about their participation in school-to-work partnerships, using a definition provided by the National School-to-Work Office, roughly one in every four establishments reported participating in school-to-work partnerships (Figure 1).

**Figure 1**  
**Employer Participation in School-to-Work Partnerships**

Question 49:

School-to-Work Partnerships consist of joint activity between schools and employers to build connections between school-based learning and work-based learning. Is your establishment participating in such a school-to-work partnership?



Both participating and non-participating employers were then asked a series of questions regarding the types of work-based learning placements that their establishments offer—ranging from shorter-term activities such as job shadowing, mentoring, and internships to more formalized and long-term arrangements such as cooperative education, youth apprenticeships, and registered apprenticeships. The activities were described to respondents using formal definitions provided by the National School-to-Work Office, and the actual text of the questions are presented in Table 1.

**Table 1**

**Definitions of School-to-Work Activities**

Question 50:

Is your establishment participating in any of the following work-based learning activities for high school or community college students? How many students were involved in each activity during the past year?

<b>Activity</b>	<b>Definition</b>
Job Shadowing?	Where a student follows an employee for one day or more to learn about a particular occupation or industry.
Mentoring?	Where an employee is assigned to guide a student and serve as a liaison with the school on behalf of the student and the firm.
Internships?	Where, for a specified period of time, students work for an employer to learn about a particular occupation or industry. This may or may not include financial compensation.
Cooperative Education?	A method of instruction whereby students alternate or coordinate their academic and vocational studies with a paid or unpaid job in a related field.
Registered Apprenticeships?	Formal programs registered with the U.S. Department of Labor or with an approved state apprenticeship agency. Registered apprenticeships are typically paid work experiences.
Youth Apprenticeships?	Multi-year programs combining school- and work-based learning in an occupation area. These are designed to lead directly into a related postsecondary program, entry-level job, or registered apprenticeship program. These apprentices may or may not be paid.



**Figure 2**  
**Percentage Distribution of Work-Based Learning Placements**

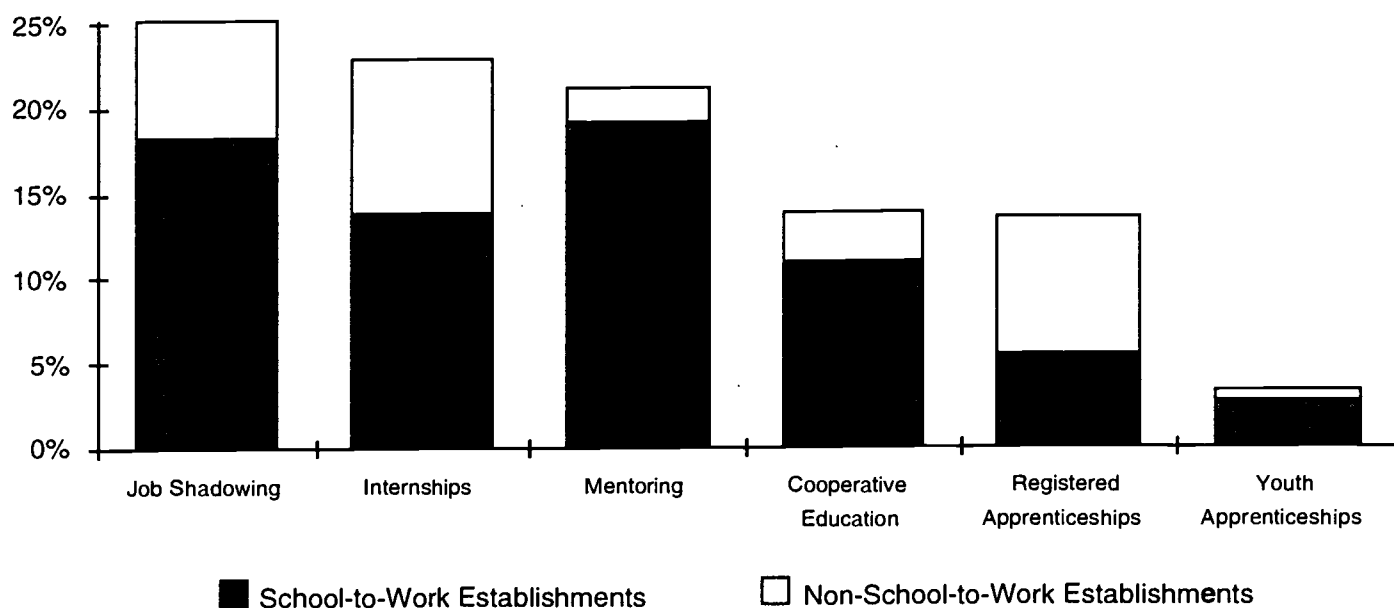


Figure 2 depicts the percentage distribution of these work-based learning placements among establishments participating—and *not* participating—in school-to-work partnerships. Since the survey captured placements for high school as well as community college students, the magnitude of the results is not surprising. As Figure 2 shows, activities such as job shadowing, internships, and mentoring offer the most placements for the nation's students—respectively, 25 percent, 23 percent, and 21 percent of all placements were in these activities. While most of the placements are in school-to-work establishments, a substantial number of non-school-to-work employers offer activities such as job shadowing, internships, and registered apprenticeships. In particular, youth apprenticeships and mentoring were viewed as activities associated with formal school-to-work partnerships.

## The Profiles: Participation by Size and Industry

When describing employer participation in school-to-work programs, it helps to determine what types of employers engage in school-to-work partnerships: both by size and by industry.

Table 2 parses the responses to Question 49 by size, depicting the percentage of all establishments that participate in school-to-work partnerships by the number of their employees. Although participation is apparent in establishments of all sizes, it is most prevalent among the nation's larger employers. While only 24 percent of establishments with 20 to 49, or 50 to 99, employees engage in school-to-work partnerships, 42 percent of those with 250 to 999 employees, and 60 percent of those with 1,000 or more employees, reported that they participate.

**Table 2**  
**Percentage of Establishments Participating in School-to-Work Partnerships by Number of Employees**

Number of Employees	Percentage of Employers Participating in School-to-Work
20 to 49	24%
50 to 99	24%
100 to 249	33%
250 to 999	42%
1,000 or more	60%
Overall	26%

Table 3 distributes the responses to Question 49 according to industry. Within the manufacturing sector, employer participation is most common in the Transportation Equipment and Primary Metals industries, with 35 percent of the employers in the former industry and 30 percent in the latter industry participating in school-to-work partnerships. Within non-manufacturing, the participation rates in specific industries are slightly higher. For Health Services and Communications, 44 percent of the establishments in those industries reported that they participate, followed by Utilities (37 percent), Finance (35 percent), and Hotels (32 percent).

## **The Deciding Factors: What Affects Employer Participation?**

Knowing how many and which employers engage in school-to-work partnerships represents only one piece of the participation puzzle. A second piece derives from an understanding of the factors that encourage individual establishments to participate. When we separately model that participation for manufacturing and non-manufacturing establishments, the same four factors are identified: participation in community activities, the single most important factor; growth in the size of the establishment's permanent workforce over the last three years; use of teachers' references in the making of hiring decisions; and judging local high schools to be adequate or better in preparing their students for the workforce. Figures 3 and 4 graphically reflect each factor's relative importance. This modeling also makes clear that there are important differences between industries in terms of their rates of participation in school to work partnerships.

**Table 3**  
**Percentage of Employers Participating in School-to-Work Partnerships**  
**by Industry**

	Industry	Percentage of Employers Participating in School-to-Work
<b>Manufacturing</b>	Food & Tobacco	16%
	Textile & Apparel	24%
	Lumber & Paper	12%
	Printing & Publishing	27%
	Chemicals & Petroleum	24%
	Primary Metals	30%
	Fabricated Metals	25%
	Machinery / Instrumentation	25%
	Transportation Equipment	35%
	Miscellaneous Manufacturing	22%
<b>Non-Manufacturing</b>	Construction	15%
	Transportation Services	15%
	Communication	44%
	Utilities	37%
	Wholesale Trade	21%
	Retail Trade	28%
	Finance	35%
	Insurance	19%
	Hotels	32%
	Business Services	18%
	Health Services	44%
	Overall	26%

**Figure 3**

**Significant Factors Affecting Employer Participation in School-to-Work Partnerships: Manufacturing Establishments**

## **Manufacturing Establishments**

Establishment is:

- More likely to participate in community activities
- More likely to have increased the size of its permanent workforce in the last 3 years
- More likely to rate local high school as adequate or better in preparing students for the workforce
- More likely to use teacher's references in making hiring decisions

**Figure 4**

**Significant Factors Affecting Employer Participation in School-to-Work Partnerships: Non-Manufacturing Establishments**

**Non-Manufacturing Establishments**

Establishment is:

- More likely to participate in community activities
- More likely to rate local high school as adequate or better in preparing students for the workforce
- More likely to have increased the size of its permanent workforce over the last 3 years
- More likely to use teacher's references in making hiring decisions

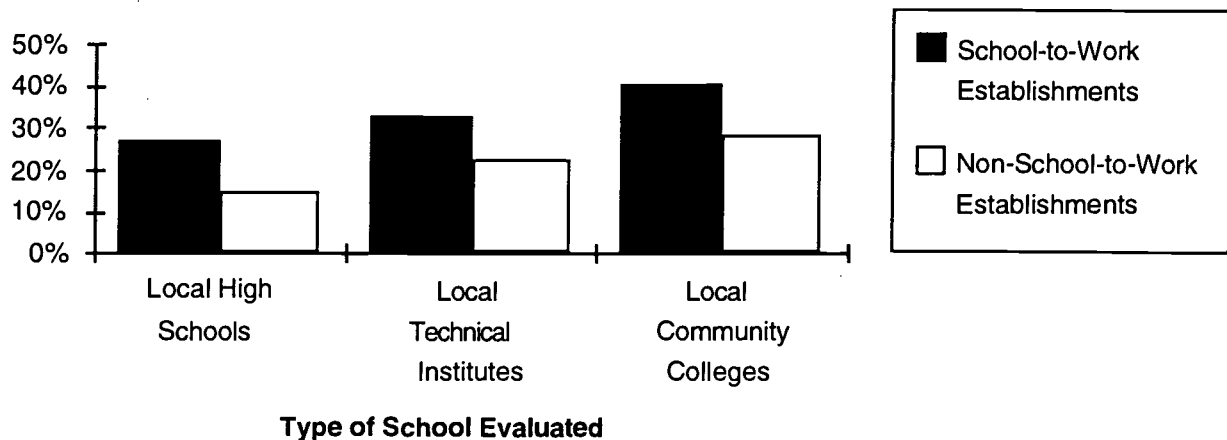
Finally, there appears to be a more general link between employer satisfaction with how well schools prepare students for the workforce and their participation in school-to-work partnerships. Figure 5 depicts the percentage of participating and non-participating employers that rated the preparation of students for the workforce by local high schools, technical schools, and community colleges as being “more than adequate” or “outstanding.” For each type of institution, a greater percentage of employers who participate in school-to-work partnerships report higher satisfaction with schools’ performance in this area. What is not clear is whether respect for schools proceeds or follows school-to-work participation—or both.

**Figure 5**  
**Percentage of Establishments Rating Schools as “More than Adequate” or “Outstanding”**

Question 32:

Based on your experience with hiring their graduates, how would you rate your local high schools’/technical institutes’/community colleges’ overall performance in preparing students for work in your establishment?

Unacceptable  
 Barely Acceptable  
 Adequate  
 More than Adequate  
 Outstanding





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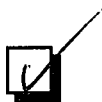


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